

## Water in New York















WATER is the resource of life. Since the late 1800's the U.S. Geological Survey (USGS) has been working in New York to provide reliable information about our State's water resources.

The information collected by the USGS, whether it is from today, last month, or many years ago, is only a mouse click – http://ny.usgs.gov – or a phone call away – (518) 285-5602.

#### HYDROLOGIC INVESTIGATIONS are

conducted to help understand and solve water-resource problems. Some of the water issues being addressed in New York include:

- Pesticides in sources of drinking water
- Identification of water supplies susceptible to contamination
- Ground-water flow and supply
- Aquifer mapping
- Health of aquatic habitats
- Effects of storm runoff on water quality and quantity
- Acid precipitation
- Sediment transport, deposition, and dredging
- Effects of land use (such as urban, agriculture, or forest) on water quality

#### HYDROLOGIC DATA COLLECTION is

the foundation of USGS programs. The USGS collects and analyzes hydrologic data using nationally consistent, state-of-the-art methods to provide information that is reliable and precise. Some of the types of data being collected are:

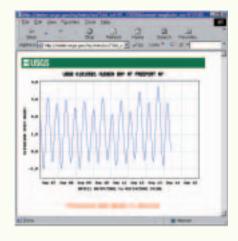


Streamflow measurement using a water-velocity meter (Photo by Michael Nolan).

- Streamflow at more than 245 sites (almost 70% are available in near-real-time)
- Flood stage and frequency
- Tide stage and coastal flood data
- Continuous ground-water levels at more than 35 sites (with less frequent monitoring at an additional 500 sites)
- Saltwater-freshwater interface location in the Hudson River
- Water-quality and (or) water temperature at over 30 streams
- Pesticide concentrations in surface and ground water.

INFORMATION MANAGEMENT AND DISTRIBUTION is accomplished through many kinds of media. All surface-water, ground-water, water-quality, and biological data are maintained in the National Water Information System (NWIS). Data from NWIS are provided to the public on the internet. Many of these data are collected from the streams and rivers through automatic

data recorders and satellite telemetry so the data can be provided to the public in near-real-time over the internet. To access the data go to <a href="http://water.usgs.gov/ny/nwis/nwis">http://water.usgs.gov/ny/nwis/nwis</a>. Data are also published annually in "Water Resources Data, New York," (three volumes). Reports from hydrologic investigations and research efforts are published in peer-reviewed reports and journals, and are available on the internet at <a href="http://ny.usgs.gov">http://ny.usgs.gov</a>.



Example of near-real-time tide-stage data (Hudson Bay at Freeport, NY). Graph shows water-surface elevation changes over about 7 days.

FUNDING PARTNERSHIPS between the USGS and State and local agencies have existed in New York since 1898. These partnerships contribute to increased awareness of State and local water issues, and share the cost of regional water-resources investigations, issue-specific studies, and the collection of water-resources data.

# THE USGS is the Nation's largest water, earth, and biological science and non-military mapping agency. The USGS works in cooperation with more than 2,000 organizations across the United States to provide reliable scientific information to resource managers, planners, and other customers to:

- describe and understand the earth and ongoing processes which reshape it
- minimize the loss of life and property from natural disasters
- manage water, biological, energy, and mineral resources, and
- enhance and protect our quality of life.

Funding for New York District projects comes from:

- (1) the USGS Federal Budget,
- (2) other Federal agencies or
- (3) funding partnerships with State and local agencies through the Cooperative Funding Program.



The New York District office is in Troy, NY. Subdistrict offices are maintained in Ithaca and Coram, in addition to a field office in Potsdam. See map for the approximate locations of these offices and their area of responsibility, or visit <a href="http://ny.usgs.gov">http://ny.usgs.gov</a> for directions.

### FOR ADDITIONAL INFORMATION or to discuss project proposal ideas, contact the

District Chief or subdistrict office in your area at the addresses and phone numbers listed below.

U.S. Geological Survey General Information (518) 285-5602

District Chief 425 Jordan Road Troy, NY 12180-8349 Phone (518) 285-5600 Fax (518) 285-5601

Subdistrict Chief U.S. Geological Survey 30 Brown Road Ithaca, NY 14850-1572 Phone (607) 266-0217

Subdistrict Chief U.S. Geological Survey 2045 Route 112, Bldg. 4 Coram, NY 11727 Phone (631) 736-0783

Front Page Photos (from top): Lake Colden, by J. Kelly Nolan; Great Blue Heron, by Ethno Graphics©; Sprinklers Watering lawn, by Gettyworks; Flooded House, by Mike Austad; Ice Streamflow Measurement, by Michael Nolan; Artesian Well in Tully Valley, by William Kappel; Drinking Fountain by USGS